

Labour income differences: a comparison between Brazil and Argentina*

Paulo Baltar[♦]
Eugênia Troncoso Leone
Alexandre Gori Maia

Introduction

The aim of this paper is to emphasize the peculiarities of labour income differences in Brazil, through a comparison with Argentina. The analyses were based on information obtained from two household surveys: PNAD (*Pesquisa Nacional por Amostra de Domicílios*) carried out by IBGE (*Instituto Brasileiro de Geografia e Estatística*), for Brazil and EPH (*Encuesta Permanente de Hogares*) carried out by INDEC (*Instituto Nacional de Estadística y Censos*), for Argentina. The reference year of both surveys was 2006.

In order to allow comparisons between both household surveys, it was considered, in PNAD, only the private permanent urban domiciles from metropolitan areas and cities with more than 100 thousand inhabitants and, in EPH, only information from the 31 main urban agglomerations.

In both surveys, people were considered employed if they were 15 or older and did any work at all for pay or profit during the reference week. Employed population was classified by gender, age and educational attainment. The age groups used were: from 15 to 29 years, from 30 to 49 and over 50 years. The educational levels considered were: less than primary, primary, secondary and tertiary education. Labour incomes were deflated to July 1st 2004 and converted to US dollars, considering the Purchasing Power Parity (PPP) proposed by the United Nations (UN). For Brazil, it was used as deflator INPC (*Índice Nacional de Preços ao Consumidor*), proposed by IBGE and, for Argentina, IPC (*Índice de Precios al Consumidor*), proposed by INDEC.

1. Labour income differences between Brazil and Argentina

In Brazil, labour income differences between workers are very significant. This paper discusses some aspects of such differences, comparing Brazil to Argentina, where the labour income differences, in spite of being also large, are lower than in Brazil.

Considering only people with positive labour incomes and those who declared age, gender and educational level, the comparison between Brazil and Argentina for 2006 revealed that the Gini coefficient for labour income inequality reduced slowly in Brazil, while in Argentina it increased in the late 1990s and then has been falling since 2003 (Table 1).

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♦ Professors at the Institute of Economics in the State University of Campinas (Unicamp), Brazil. Financial support of the CNPq is gratefully acknowledged.

Table 1

Gini coefficients of income labour corresponding to main job. Brazil and Argentina, 1995 to 2006

years	Brazil	Argentina
1995	0.555	0.430
1996	0.550	0.430
1997	0.546	0.431
1998	0.547	0.453
1999	0.540	0.436
2000	0.543	0.449
2001	0.547	0.466
2002	0.546	0.486
2003	0.539	0.478
2004	0.532	0.460
2005	0.532	0.456
2006	0.527	0.439

Source: IBGE: PNAD; INDEC: EPH.

The data from Table 1 also show the importance of knowing better about the labour income differences in Brazil. The comparison with the neighboring country will allow a better qualification of such differences.

2. Patterns by age and gender for population over 15 years old

The distribution of employed population according to age and gender is similar in both countries. Although the proportion of females is exactly the same, the distribution by age is slightly different. Argentina presents a higher proportion of population over 50 years, while Brazil has a higher proportion of population between 30 and 49 years (Table 2). These demographic differences observed in urban population in 2006 reflect different histories in respect of demographic transition and urban concentration in both countries.

Table 2

Distribution of total population by age groups and gender. Brazil and Argentina, 2006.

Age group	Proportion of Females		Total		Males		Females	
	BR	ARG	BR	ARG	BR	ARG	BR	ARG
15 - 29	51	52	36	35	37	36	34	33
30 - 49	53	53	38	33	38	33	38	32
50 +	57	57	26	32	24	30	28	34
Total	54	54	100	100	100	100	100	100

Source: IBGE: PNAD; INDEC: EPH.

Argentina has concluded its demographic transition before Brazil. However, until 2006 both countries witnessed huge advances in this transition. As a result, the proportions of population between 15 and 29 years were similar.

3. Population's educational attainment

The Argentinean employed population has a higher educational level than the Brazilian one. The high difference consists in the fact that in Brazil the proportion of those who do not have a complete primary education is higher than in Argentina. Conversely, in this country, the proportion of population with only the complete primary education is larger than in Brazil (Table 3). The comparison between the countries, distinguishing by gender, indicates that, in the case of women, the Argentinean educational superiority involves also a higher proportion of women with tertiary education than in Brazil. In Brazilian case, the pattern of urban educational level for population over 15 years old is similar for both sexes, while in Argentina the female educational pattern is superior to the male one.

Table 3

Educational attainment (people 15 or over). Brazil and Argentina, 2006

Educational attainment	15 +		Males 15 +		Females 15 +	
	BR	ARG	BR	ARG	BR	ARG
Less than primary	37	10	37	9	37	10
Primary	20	44	21	47	19	42
Secondary	33	33	32	33	33	33
Tertiary education	10	13	10	11	10	15
Total	100	100	100	100	100	100

Source: IBGE: PNAD; INDEC: EPH.

The analysis of educational pattern by age groups must consider the fact that people older than 50 years reached the age of beginning to study (7 years) before 1964, whereas people from 30 to 49 years old reached that age between 1964 and 1983, and people from 15 to 29 years, between 1984 and 1998. The educational system of both countries has developed too much during this period, especially in Brazil, which was relatively late in comparison to Argentina.

In Brazil, in 2006, the male population over 50 years had a better educational level than the female (61% of women over 50 years did not have the complete primary education, while this proportion was 56% in the case of men). In the other age groups, mainly in the youngest one, the female educational attainment was better (Table 3.1). This indicates, therefore, that in Brazil women have benefited themselves from the advances in the educational system more than men.

Table 3.1

Educational attainment by gender. Brazil, 2006

Educational attainment	15 - 29		30 - 49		50 +	
	Male	Female	Male	Female	Male	Female
Less than primary	26	20	37	35	56	61
Primary	29	29	18	17	12	11
Secondary	40	44	33	34	19	17
Tertiary education	5	7	12	14	13	10
Total	100	100	100	100	100	100

Source: IBGE: PNAD.

In Argentina, the female educational level is slightly inferior than the male in the age group over 50 years old. In two other age groups, it is quite evident the female superiority in educational attainment. The higher frequency of women with tertiary education in this country represents the situation of women between 30 and 49 years. The women proportion in this age group with complete tertiary education is considerably higher than the men one at the same age in this country and than male and female proportion at the same age in Brazil. Similarly to Brazil, in Argentina women have enjoyed more advantages from the educational system than men (Table 3.2).

Table 3.2

Educational attainment by gender. Argentina, 2006

Educational attainment	15 - 29		30 - 49		50 +	
	Male	Female	Male	Female	Male	Female
Less than primary	5	4	7	6	17	20
Primary	51	43	43	37	47	47
Secondary	40	45	34	32	23	21
Tertiary education	4	8	16	25	13	12
Total	100	100	100	100	100	100

Source: INDEC: EPH.

Comparing both countries in terms of population's educational level, it should be considered the fact that the urbanization process in Argentina during the 1960s was quite more advanced than in Brazil. Furthermore, both educational systems have been developed since the 1960s, but more powerfully in the former country than in the latter.

These structural differences become quite evident in the differences of educational level between men and women from distinct age groups. Especially after the emancipation movement, which has also occurred since the 1960s, women have benefited themselves from the developments of the educational system more than men in both countries. This gender distinction is more relevant when the educational system is quite deficient and its tendency is to reduce with the progress of this system. Due to

this fact, the great differences by gender in the educational level, in favour of women, are observed in the group of 30-49 years and not in the groups of 15-29 years or 50 or more.

4. Employment-to-population ratio

The higher the population's educational level, the higher the employment-to-population ratio – defined as the proportion of working-age population that is employed. This can be verified for men and women of all age groups in both analyzed countries (Table 4). The greatest employment-to-population ratio of people with high educational level (complete secondary or tertiary education) occurs for adults (30 to 49 years old), the age group with the highest fraction of employed population, even between those who have a lower educational level (only the complete primary or less than that). The differences in employment-to-population ratios by educational attainment are larger for the younger (15 to 29 years) and older population (over 50 years).

Table 4
Employment rate from Males and Females by educational attainment and age groups. Brazil and Argentina, 2006

Educational Attainment	15-29		30-49		50 +	
	BR	ARG	BR	ARG	BR	ARG
MALES						
Less than primary	58	50	85	80	47	49
Primary	54	48	89	93	58	58
Secondary	77	64	92	92	63	63
Superior	85	86	96	97	72	75
Total	66	56	89	93	55	60
FEMALES						
Less than primary	31	19	54	51	23	21
Primary	34	24	59	52	33	26
Secondary	60	44	71	63	40	38
Superior	80	83	87	85	53	60
Total	48	37	65	63	30	32

Source: IBGE: PNAD; INDEC: EPH.

The comparison between both countries, controlling age, gender and educational level, indicates that the employment-to-population ratio is higher in Brazil for male and female in the youngest age group (15 to 29 years) in all educational levels, except for tertiary education. For adult females (30 to 49 years), the Brazilian employment-to-population ratio is superior in all educational levels, while females older than 50 years only present a lower ratio in Brazil than in Argentina in the highest educational level. In the whole of population over 15 years old, the employment-to-population ratio is 60.1% in Brazil and 55.7% in Argentina.

For young people from 15 to 29 years of both sexes, the employment-to-population ratio is 56.7% in Brazil and 46.6% in Argentina. For women between 30 and 49 years, the superiority of Brazilian employment-to-population ratio is not very

significant in relation to Argentinian's (65.2% and 63.4% respectively), due to the high proportion of Argentinian women at this age who have tertiary education, a level in which the employment-to-population ratio is very high. For adult male population, the proportions are 89.3% in Brazil and 92.5% in Argentina. For population older than 50 years, the ratios are, respectively, 40.8% and 43.9%.

Overall, in Brazil the fraction of population over 15 years in the economic activity is larger, because of the higher young male occupation and young and adult female occupation. As it will be highlighted further, the labour income differences between both countries are particularly significant between these young and these women, contributing to enlarge the Brazilian labour income differences.

5. Labour income

In both countries, the higher the educational level and the people's age, the higher the labour income level, and for each educational level and age group, the male labour income is, in average, much higher than the female's. Separately by each gender, the comparisons of average labour income in both countries, considering the people's age and educational level, show clearly the Argentinean superiority between young males of all educational levels, except for those who completed the tertiary education. Between the young and adult females, also for all educational levels, it can be observed the same. Only between females older than 50 years the superiority goes until a lower educational level, it means, until the complete primary education (Table 5). For adult males of all educational levels, the differences in average labour income between both countries are not very significant, what is the same for older males, apart from the case of tertiary education. For people of both sexes and all ages, the average labour income in Brazil is much higher than in Argentina for people with tertiary education.

Table 5

Income differences by educational attainment and gender. Argentina/Brazil, 2006

Educational Attainment	Male			Female		
	15-29	30-49	50 +	15-29	30-49	50 +
Less than primary	1.291	1.082	0.928	1.915	1.377	1.241
Primary	1.509	1.110	0.898	1.455	1.320	1.227
Secondary	1.253	0.994	0.905	1.417	1.233	0.996
Tertiary education	0.747	0.981	0.699	0.844	0.794	0.896

Source: IBGE: PNAD; INDEC: EPH.

To summarize, the labour income is very low in Brazil exactly for population's groups in which the employment-to-population ratio is particularly high, the young population (15 to 29 years) and the female population of all ages, except the one with the highest educational attainment. Furthermore, the labour income in Brazil is much higher than in Argentina for people with tertiary education, although it is smaller the share of workers with this educational level in Brazil than in Argentina. Therefore, it is very large the fraction of workers with low income and small the one of those who have high income, what makes Brazil a country of huge differences in labour income, much larger than in Argentina.

The income differences by gender, in each of the educational level and age group, are quite larger in Brazil than in Argentina, contributing also to emphasize the labour income inequality in Brazil (Table 5.1). These income differences by gender are lower than 10% only for young workers of low educational level in Brazil, while in Argentina the differences are small for young people with high educational level and for adults and older people with lower educational level (less than the complete primary education).

Table 5.1

Income differences by educational attainment and country. Male/Female, 2006

Educational Attainment	Brazil			Argentina		
	15-29	30-49	50 +	15-29	30-49	50 +
Less than primary	1.082	1.330	1.475	0.729	1.046	1.102
Primary	1.066	1.445	1.743	1.106	1.216	1.276
Secondary	1.249	1.491	1.475	1.104	1.203	1.342
Tertiary education	1.242	1.414	1.490	1.098	1.747	1.163

Source: IBGE: PNAD; INDEC: EPH.

Thus, the labour income differences are much larger in Brazil due to the low income and the high participation of young people and women in economic activity. Another reason consists in the relatively high income of people with tertiary education, which in Brazil represent a small fraction of employed labour force (13.6% in Brazil and 18.8% in Argentina).

6. An analysis of labour income differences according to age, gender and educational level

After describing the composition and remuneration differences of the workforce according to gender, age and educational level, it is now intended to observe how these features are related to the labour income in both countries. With this purpose, it was adjusted for each country a model of fixed effects with three classification factors, which can be expressed as follows:

$$\ln(Y)_{ijkl} = \mu + \alpha_i + \beta_j + \gamma_k + (\alpha\beta)_{ij} + (\alpha\gamma)_{ik} + (\beta\gamma)_{jk} + e_{ijkl} \quad (3)$$

Where:

- $\ln(Y)_{ijkl}$ is the neperian logarithm of labour income per hour for the l -esim individual ($l=1..n_{ijk}$) of the i -esim gender category, j -esim age category and k -esim educational level category;
- μ is the model intercept or the average value of $\ln(Y)$ for the categories considered as reference for the analysis: woman, between 15 and 29 years and, at maximum, with basic educational level (only primary education);
- α_i is the effect of the i -esim gender category (male or female – reference for the analysis) on $\ln(Y)$;
- β_j is the effect of the j -esim age category (15 to 29 years – reference for the analysis; 30 to 49; and 50 or more) on $\ln(Y)$;

- γ_k is the effect of the k -esim educational level category (until incomplete secondary – reference for the analysis; complete secondary or incomplete tertiary; and complete tertiary) on $\ln(Y)$;
- $(\alpha\beta)_{ij}$ is the effect of the interaction between the i -esim gender category and the j -esim age category on $\ln(Y)$;
- $(\alpha\gamma)_{ik}$ is the effect of the interaction between the i -esim gender category and the k -esim educational level category on $\ln(Y)$;
- $(\beta\gamma)_{jk}$ is the effect of the interaction between the j -esim age category and the k -esim educational level category on $\ln(Y)$;
- e_{ijkl} are the random residuals or the variation not explained by the categories of analysis;

Each effect (α , β , γ and their interactions or, generically, θ) represents the difference in the logarithm of labour income per hour in the main occupation associated with the category of interest. In other words, the percentage difference in the average income associated with the established category will be equivalent to $100(e^\theta - 1)\%$ (Halvorsen & Palmquist, 1980).

In its turn, the analysis of the discriminatory power of the categories of interest and their interactions on the logarithm of labour income per hour was based on the decomposition of the Sum of Squares (SS). The SS is a statistical measure of the total variability of data and its decomposition allows identifying the contribution of each variation source in total observed variability (Fisher, 1946). In this paper, it is considered seven types of SS:

- SS of all factors: total variability explained by the combination of factors and their interactions ($\mu + \alpha_i + \beta_j + \gamma_k + (\alpha\beta)_{ij} + (\alpha\gamma)_{ik} + (\beta\gamma)_{jk}$);
- SS of gender: variability due to isolated gender effect (α_i);
- SS of age: variability due to isolated age effect (β_j);
- SS of educational level: variability due to isolated educational level effect (γ_k);
- SS of gender and age: variability due to the effect of interaction between gender and age ($\alpha\beta_{ij}$);
- SS of gender and educational level: variability due to the effect of interaction between gender and educational level ($\alpha\gamma_{ik}$);
- SS of age and educational level: variability due to the effect of interaction between age and educational level ($\beta\gamma_{jk}$).

There are various techniques for estimating the SS. The choice depends above all on the nature of the experiment and on the presuppositions about the model parameters (Searle *et al.*, 1981; Manso & Morais, 2006). Since this is an observational study with unbalanced blocks, it means, with samples of different sizes for each factors crossing, it was opted for the use of the SS of type III, obtained through the routine PROC GLM from the statistical system SAS using the estimable functions methodology (SAS, 2009), which is described with more details by Searle *et al.* (1981).

The main idea of this part of analysis is to verify which source (of gender, age, educational level or interactions between them) contributes more to the SS of all factors, it means, which one has the major discriminatory power on the relative variation of

labour income per hour. It was also considered the degrees of freedom (*df*) related to each variation source, the Mean Squares (*MS*) and the statistical tests (*F* statistic and *p*-value) to test the significance of the contributions. All estimations were weighted by the expansion weights for sample available in the researches of both countries.

Table 6 presents the results for the analyses of variance of Brazil's and Argentina's labour income equations (equation 3) in 2006, emphasizing the expressive difference between the R^2 in both countries. The higher total income variability in Brazil (*Total MS*) indicates that the factors play a more important role in the income discrimination in this country than in Argentina. The total variability of the logarithm of labour income per hour explained by the factors and their interactions considered in the model is 40% in Brazil and only 28% in Argentina.

Table 6
Analysis of variance of the income equations. Brazil and Argentina, 2006

Country	Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>	R^2
Argentina	Model	13	1,044,731	80,363.9	1,210.7	***	0.2784
	Residual	40,805	2,708,555	66.4			
	Total	40,818	3,753,286	92.0			
Brazil	Model	13	10,210,578	785,429.1	4,541.2	***	0.3954
	Residual	90,284	15,615,357	173.0			
	Total	90,297	25,825,935	286.0			

Source: PNAD, microdata, IBGE; EPH, microdata, INDEC.
Three asterisks mean statistical significance at 0.1%.

For both countries it has to be pointed out that the major contribution to the labour income discrimination comes from educational level. As shown by the disaggregation of the *SS* of type III in Table 6.1, 81% of variability explained by the model in Brazil results from the isolated effect of the three educational level categories, while in Argentina this represents 82%. The age contribution is slightly greater in Argentina and the gender one, despite being the least important among all factors, is superior in Brazil. This means, for instance, that the change from one age group to another (logically a superior age group) represents a bigger guarantee of greater labour income earnings in Argentina than in Brazil, although this analysis do not allow to quantify the difference. Moreover, the interactions between the factors associated with age, gender and educational level are little expressive, in spite of being statistically significant, to explain the labour income discrimination both in Argentina and in Brazil (4% together).

Table 6.1
Sum of Squares of type III for the income equations. Brazil and Argentina, 2006

Source	df	Argentina					Brazil				
		SS	%	MS	F	p	SS	%	MS	F	p
Age	2	116,334	13.7	58,167	876	***	975,040	11.6	487,520	2,819	***
Gender	1	22,305	2.6	22,305	336	***	417,920	5.0	417,920	2,416	***
Educational level (EL)	2	696,195	81.7	348,097	5,244	***	6,795,151	80.9	3,397,575	19,644	***
Age×Gender	2	2,641	0.3	1,320	20	***	52,358	0.6	26,179	151	***
Age×EL	4	13,521	1.6	3,380	51	***	115,520	1.4	28,880	167	***
Gender×EL	2	1,036	0.1	518	8	***	41,170	0.5	20,585	199	***
Total	13	852,032	100				8,397,159	100			

Source: PNAD, microdata, IBGE; EPH, microdata, INDEC.

Three asterisks mean statistical significance at 0.1%.

Although the analysis of the discriminatory power allows verifying which factors are more strongly associated with the variations in relative income, i.e. those which represent a major guarantee of labour income variation due to a change in the category of analysis, it does not allow quantifying this variation. In order to identify the relative variation in the labour income according to changes in the categories of analysis, Table 6.2 presents the model coefficients estimated by the weighted least squares method using the people's weights in the sample. The reference of analysis is an employed person in the most precarious condition: female, with no more than incomplete secondary and between 15 and 29 years old. Thus the percentage differences ($[e^{\theta}-1]\times 100$) represent a greater or a smaller variation in relation to the income of these referential categories. Due to the high number of observations in the sample, most coefficients were statistically different from zero at a 0.1% level of significance.

Among other results, it must be pointed out that, although the income difference between men and women with low educational level is slightly superior in Argentina (8%) than in Brazil (5%), the variations are greater in Brazil when considered the combinations with employed people's age and educational level. For instance, young men with complete secondary would earn, in average, 18% more than young women at the same conditions of educational attainment in Brazil (5% + 13%) and only 10% more in Argentina (8% + 2%).

A similar result occurs to the relation between gender and age. Especially in Brazil, the income difference in favour of those who are older is intensified for men, it means, not only men earn, in average, more than women, but also this income difference would be even greater for the oldest people. In other words, labour income progression due to age, a proxy for the professional experience of the employed person, would be specially associated with men.

The variations in educational level make possible the greatest labour income progressions, especially in Brazil, where the inequalities between the social groups are greater and the insertion of young people without educational attainment is even more precarious. For example, for the young women, having completed the secondary education means an average income per hour 30% and 41% superior in Brazil and Argentina, respectively. For men and for those who are older, these differences would be much greater. For instance, adult men (30 to 49 years) with complete tertiary would earn in Brazil, in average, 252% more than adult men with incomplete secondary (204% + 31% + 18%) and 133% more in Argentina (118% + 20% - 5%).

Table 6.2

Estimations of the coefficients of the income equations. Brazil and Argentina, 2006

Parameter	Argentina				Brazil			
	θ	$e^{\theta}-1$	t	p	θ	$e^{\theta}-1$	t	p
Intercept	0.957		72.56	***	0.616		70.08	***
Age								
30 to 49	0.151	0.163	10.21	***	0.133	0.142	13.51	***
50 or more	0.202	0.224	12.24	***	0.222	0.249	18.04	***
Gender								
Male	0.078	0.081	5.52	***	0.051	0.053	5.36	***
Educational level (EL)								
Complete secondary	0.342	0.408	23.15	***	0.261	0.299	26.49	***
Complete tertiary	0.780	1.181	37.39	***	1.111	2.036	73.91	***
Age×Gender								
30 to 49 and Male	0.088	0.092	5.99	***	0.157	0.170	15.92	***
50 or more and Male	0.086	0.090	4.98	***	0.181	0.199	13.75	***
Age×EL								
30 to 49 and comp. secondary	0.039	0.039	2.50	0.012	0.180	0.198	17.40	***
30 to 49 and comp. tertiary	0.180	0.198	8.03	***	0.270	0.310	16.75	***
50 or more and comp. secondary	0.077	0.080	4.13	***	0.310	0.364	20.83	***
50 or more and comp. tertiary	0.360	0.433	14.15	***	0.311	0.365	16.13	***
Gender×EL								
Male and comp. secondary	0.018	0.018	1.30	0.193	0.121	0.128	12.61	***
Male and comp. tertiary	-0.051	-0.050	-3.02	0.002	0.164	0.178	12.58	***

Source: PNAD, microdata, IBGE; EPH, microdata, INDEC.

Three asterisks mean statistical significance at 0.1%.

The results point generally out to the fact that the differences concerning age, gender and, especially, educational level are expressive both in Argentina and in Brazil. In the latter, however, these differences would be more intense not only because of the most precarious insertion in the occupational structure of the groups in the worst conditions (women, young people and those with the lowest educational levels), but also due to the possibilities of higher income for those few Brazilians who have completed tertiary education, above all for men and older people. Another interesting result is that the income variations are more expressive for some social groups. For instance, the income increments for men due to an increase in the educational level would be greater than for women. A similar situation occurs for the younger and older people.

In order to corroborate the previous analyses, Figure 1 shows the average income per hour in Brazil and Argentina according to gender, age and educational level of the employed people. It is possible to observe the huge differences between those with incomplete secondary and those with complete tertiary. Moreover, these differences tend to become greater for older people. It is also noticeable that for those who have until the complete secondary the average income tends to be lower in Brazil than in Argentina. Nevertheless, for those who have finished tertiary education the average income per hour in Brazil becomes 43% superior than in Argentina.

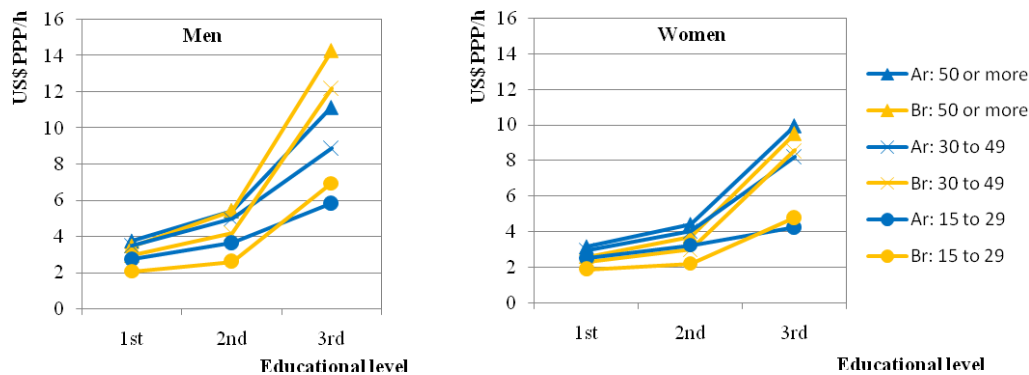


Figure 1

Average labour income per hour according to gender, age and educational level. Argentina and Brazil, 2006

Source: PNAD, microdata, IBGE; EPH, microdata, INDEC.
Values at July 2004.

Conclusion

The labour income differences have recently shown a slow reduction in Brazil. This decrease in inequality was associated not only to the diminution of young people's participation in economic activity (less than 20 years), but also to the increase of female participation in economic activity and to an enlargement of educational level of Brazilian population.

During the 1990s it was noticed a significant change in people's age pattern from the worst remunerated occupations, which in the past, when Brazilian economy grew rapidly, were the way of entering upon developing urban labour market. The economic stagnation since 1980 and the transformations resulted from its openness to exterior in the 1990s reduced the opportunities to people move from these occupations to others with better perspectives on professional achievement and income level. Without option, people remained in the same occupations, which were before the way of entering upon labour market. Despite the fact that the income of these occupations has slightly improved, it has represented very little compared to the perspectives on betterment caused, in past, by the possibility of moving up.

More recently, since 1999, when occurred the devaluation of real, and more clearly, after 2003, with the world's growing demand and the commodity price augmentation, which have favorably influenced the Brazilian economy, the degree of formalization of labour relationships in those occupations worst remunerated has increased. Moreover, these occupations were benefited by the governmental policy on minimum labour income recovery.

The comparison of labour income diversity between Brazil and Argentina, considering the differences by gender, age and educational attainment, pointed to the fact that the proportions of young workers and females with very low remunerations remain high in Brazil. In spite of that, for older workers with tertiary education the income is relatively high, emphasizing the inequality. Furthermore, although the female participation in economic activity is greater in Brazil than in Argentina, the income

differences by gender, controlling age and educational level, are significantly higher in Brazil.

The high dispersion of Brazilian labour income is commonly interpreted as disequilibrium between supply of and demand for work, pointing up the contrast between the intensity of economic development and the population's low educational level. During the period of the country's development, the economy has provided opportunities for income gains through work. However, it was intense the dispute over the occupations without requirements of high educational level, especially because many people fighting for them did not have almost any educational qualifications. The occupations requiring some educational level, mainly the tertiary education, provided much more occupational place for a relatively small educated population.

The effects of these disproportions between supply of and demand for work were affected by the extreme disruption of labour market framework in Brazil, where it has never had clear rules of entering and leaving age from labour market, professional requirements for the performance of many occupations, magnitude of workweek and increase in income purchasing power due to increments of working productivity. During the economic development, the unfavorable political conditions for the institutional progress needed for the construction of a labour framework contributed, on the one hand, to the fact that the total mass of labour income did not accompany the growth rate of employers' total income, and on the other hand, to the consolidation of a severely unequal labour income distribution in Brazil, similar to the population's income distribution by educational level.

Since 1980 the country has strengthened the democracy, but the economy has interrupted the development and in the 1990s it was submitted to the strong external competition under very unfavorable conditions, caused by the intense capital inflow, which appreciated significantly the national currency. Only more recently, especially after 2003, the world's economic performance and its effects on commodity market have enabled favorable conditions for Brazilian growth recovery. Furthermore, it is not only increasing the educational level of population, but also decreasing the participation of very young people in economic activity and augmenting the participation of adult population.

The labour income differences have slowly reduced. Their faster decrease depends on the economic development upturn and on a better labour framework. This one requires an institutional progress to facilitate the development of collective hiring of work, the continuity of increasing labour formalization and of minimum labour income recovery policy. The advance towards a better structured labour market in Brazil will probably be accompanied by the continuity of the reduction in the proportion of young people who participate of the economic activity and also by the decrease of labour income differences by gender.

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